The fields are prepared with
/283 cont./

241 machetes and fire. They are the so-called rozas, a barbarous, primitive, and criminal method of agriculture. Burning is a habit of natives and colonists alike and goes so far that even the vegetation of the cliffs, crags, and escarpments is burned, where obviously no practical use can be derived and in addition it leaves the denuded rock at the mercy of the agents of erosion.

136 Fauna.--The fauna consists of a few classes of ophidians and small mammals: tinajos, coatis, pacas, armadillos, porcupines, foxes, deer, tapirs, sloths, and rabbits. Bears, ocelots, and pumas are found in the virgin montañas. Birds, such as wild pigeons and chachalacas, abound.

132 Climate.--There are no data on the rainfall, temperatures, /284/ and winds of this zone. The climate on the whole is temperate, or, to put it better, it is a coffee-growing climate.

361 Owing to the unevenness of the terrain, the natives inhabit
133 a region that extends from 1,000 meters (Itaibe) up to 2,500
132 meters above sea level (Suin, Mosoco, Vitoncó, and Lame). According to Dr. Gregorio Hernández de Alba, at the time of the Conquest the Paez peoples of Tierradentro inhabited "altitudes and climates between 2,620 meters with 13 degrees centigrade and 1,650 meters with 17 degrees centigrade on the average" (1).

1. Hernández de Alba (Gregorio), p. 917 /see the bibliography in the foreign text, p. 309/.

132 The atmospheric humidity and the rainfall increase as the cordillera becomes higher and snow-capped Huila draws nearer, with two summers and two winters, influenced, of course, by the topography, the vegetation, and proximity to the summit. There is an intense summer during the months of January and February, and another in July, August, and September. The winters are intense during the months of March-June and, on a smaller scale, in October-December. Snow-capped Huila

7:Hernández de Alba E-5,1(no date) 1946 SC15 Paez SC15

from the *Páez*, the *Páez* from the *Pijao*, the *Andaqui* from the *Tama* of Bajo Huila.

This extremely varied habitat offers a great range of food resources and of possibilities for agricultural crops. In the high, cold mountains and altiplanos, between 2,500 and 3,000 m. (about 8,200 to 9,800 ft.) elevation, where the mean temperature is 11 to 15° C., the principal crops were potatoes (*Solanum andigenum*), ullucos (*Ullucus tuberosus*), and cubios (*Tropaeolum tuberosum*). In the medium zone, between 1,800 and 2,500 m. (about 5,200 to 8,200 feet), with a temperature of 15 to 20° C., the main crop was maize (*Zea maya*), but arracacha (*Arracacia esculenta*), quinoa (*Chenopodium quinoa*), and sweet potato (*Ipomoea batatas*), were also cultivated. In the low, warm zone between 500 to 1,600 m. (about 1,600 to 5,200 feet), with a temperature of 20 to 28° C., the main crops were maize, sweet manioc or yuca (*Manihot utilissima*) and beans (*Phaseolus vulgaris*).

The cold lands also produced in addition to these principal crops, maize, squash (*Cucurbita maxima*), wild fruits, birds including ducks (Anatidae), doves (Columbidae), guans (*Penelops*), mammals such as the spectacled bear (*Tremarctos ornatus majori*), and other small, wild beasts like the armadillo (*Dasypus novemcinctus*), guaratinajo (*Dinomys branickii*), guatin (*Dasyprocta fuliginosa candelensis*), and small fish from the rivers and lakes. The guinea pig (curí or cuy, *Cavia aperea*), which is prolific in all the climates, was the only domesticated animal and is an important source of food of the modern Indians.

The inhabitants of the medium, humid zone were more favored by nature in that crops grew faster and in greater variety. In addition to the plants named, they grew achira (*Canna edulis*), auyama (*Cucurbita verrucosa*), beans (frijoles), and peanuts (*Arachis hypogaea*). Among the great variety of wild foods were fruits, granadilla (*Passiflora ligularis*), guayaba (*Psidium*), guama (*Inga* spp.), avocados (*Persea Americana*), papaya (*Carica papaya*), guanabana (*Annona muricata*), and chirimoya (*Annona cherimolia*), and such animals as deer (*Mazama rufina*, *M. gualea*, and *Odocoileus virginianus consul*), rabbits (*Sylvilagus fulvescens*), guinea pigs, various rodents, and large birds, such as chachalacas (*Ortalis*) and guans (*Penelope*).

Additional foods of the low, warm regions were sweet potatoes, beans (frijoles), and yams (*Dioscorea alata*); such fruits as pineapples (*Ananas sativus*), papaya, custard apple (*Annona squamosa*), cactus fruit (*Opuntia* spp.), and plantains (*Musa paradisiaca*); and large fish from the rivers.[1]

[1] The scientific names of the plants were taken from Cortés, 1919. The mammals were tentatively identified by Dr. Remington Kellogg, of the Division of Mammals, U. S. National Museum, and the birds by Dr. Alexander Wetmore, Secretary of the Smithsonian Institution.

T:Hernández de Alba E-54(no date) 1946 SC15 Paez SC15
Moguex

SUBSISTENCE ACTIVITIES

241 **Farming.**—The main subsistence of these tribes was and still is based on the cultivation of potatoes, which grow in great quantities in the higher portions of the territory known as Tierradentro, and maize, which is acclimated to the temperate and cold zones. There are three varieties of maize: sweet, soft, and hard. Additional crops were and are yuca or manioc, sweet potatoes, auyamas, ullucos, purutos, frijoles, arracacha, and various other vegetables, and a variety of fruits, including bananas, guayavas, avocados, papayas, [478] pineapples, and passion fruit. Today the *Pdez* and *Moguex* are be- [433] ginning to grow wheat, coffee, which is an important item in their [273] economy, and sugarcane, from which is made a coarse sugar and molasses for their fermented drink, guarapo.

241 The men and women of each family generally cultivate the family 476 plot, but for large-scale maize or coffee planting, and for cultivation of the lands of the Church or saint, they work communally, and have meetings called "mingas." Communal work for any particular [782] individual is truly loaned labor, with obligatory recompense. The [273] beneficiary must feed his helpers, generally sacrificing a pig and preparing great quantities of chicha for the libations and nocturnal dances after the work. All adults must participate in working the Church lands, but each brings his own food.

241 Implements of cultivation are the digging stick, or macana, for 412 making holes for planting, machetes and axes for destroying vege- 407 tation, and picks and shovels for removing earth, except where re- 492 placed by plows pulled by animal traction.

Domesticated animals.—Domesticated animals include chickens, 231 turkeys, some pigs, dogs, and a few horses and cows. All but the [177] turkeys are of European origin. These animals are rarely sold or killed for food, except for feast days, magical ceremonies, meetings, [43] and visits of relatives, friends or distinguished White men. But [25] sometimes the Indians buy meat in the weekly market and hang it over the hearth, where it is preserved by the smoke.

574 A custom which has persisted since the beginning of the Colonial 431 Period is that of always giving a guest the "camarico" or "cariño" (affection), a present varying from an egg to a chicken, together with some potatoes, vegetables, and coffee beans.

262 Formerly, meat was obtained from wild rather than domesticated 136 animals—boars (zaínos), guaras, guatines, birds, and guinea pigs, the 231 last being true domesticated animals kept in some numbers in the native houses.

252 **Food preparation.**—Food was cooked in pottery ollas, but metal and [415] enamel ware is now often used. The *Pdez* make "mute," a soup of [177] boiled maize, cabbage, squash, and potatoes, and "cocido," a soup